

Bauer v. Al Qaeda Islamic Army, et al.
Civil Action No. 02-7236
EXHIBIT B



August 29, 2016

Dorothea M. Capone, Esq.
BAUMEISTER & SAMUELS, P.C.
140 Broadway, 46th Floor
New York, New York 10005

Re: Todd Beamer

Dear Ms. Capone:

Sobel Tinari Economics Group was retained to evaluate economic damages as a result of the death of Todd Beamer. Background facts regarding the decedent and family were provided in a packet of documents pursuant to this matter.

Sobel Tinari Economics had been previously retained by Baumeister & Samuels, P.C. to evaluate decedent's economic damages. This analysis serves as an update, as of this date, of the present value of economic losses incurred by decedent's family members in this matter. Within a reasonable degree of economic certainty, and based on the facts and analysis attached to this letter, it is our professional opinion that the total present value of the past and future pecuniary losses resulting from the death of Todd Beamer amounts to **\$28,200,157**.

This amount does not take into account the ramifications of intangible, non-economic losses such as human suffering, love, emotional feelings, or consortium that may have been experienced by decedent and decedent's family members.

The detailed calculations are shown in the tables attached to this letter.

The preceding findings are based on information provided to us as of this date. They are subject to revision should additional information be forthcoming that would change any facts or assumptions upon which this analysis rests.

Reply to:

293 Eisenhower Parkway, Suite 190
Livingston, NJ 07039
Tel 973.992.1800
Fax 973.994.1571

www.sobeltinariconomics.com

112 West 34th Street, 18th Floor
New York, NY 10120
Tel 212.201.0938
Fax 212.201.0937

BAUMEISTER & SAMUELS, P.C. / Beamer

August 29, 2016

page 2

We trust that you will find the report clear and informative. Should you have any additional questions, or wish to explore any aspect of our findings in more detail, please do not hesitate to contact us. Our current Qualifications Profiles are appended.

Lastly, we certify that the Sobel Tinari Economics Group has received, thus far, \$0 compensation for preparation of an updated report for Todd Beamer. As of this date, an outstanding balance of \$2,000 is due. Our services are billed according to our Professional Fees, a copy of which is attached to this letter.

Sincerely,



Kristin Kucsma, M.A.



Kenneth T. Betz, MBA, M.A.



Todd M. Beamer

born: November 24, 1968

died: September 11, 2001

age: 32.80 years

statistical retirement: 68.61 years (July 3, 2037)¹

worklife ratio: 91.3%²

life expectancy: 78.80 years (September 11, 2047)³

residence: Cranbury, New Jersey

education: Master's degree

employer: Oracle Corporation

position: Account Manager

spouse: Lisa K. Beamer (born: 04/10/69)

spouse's life expectancy: 82.52 years (October 18, 2051)³

children: David (born: 01/06/98)

Andrew (born: 02/03/00)

Morgan (born: 01/09/02)

1

Gary R. Skoog and James E. Ciecka, "Probability Mass Functions for Years to Final Separation from the Labor Force Induced by the Markov Model," *Journal of Forensic Economics*, 16(1), 2003, pp. 51-86, by interpolation.

2

Gary R. Skoog, James E. Ciecka and Kurt V. Krueger, "The Markov Process Model of Labor Force Activity: Extended Tables of Central Tendency, Shape, Percentile Points, and Bootstrap Standard Errors", *Journal of Forensic Economics*, Volume 22, No. 2, August 2011, pp. 183-190, by interpolation.

3

National Vital Statistics Reports, Volume 64, No. 11, United States Life Tables, 2011, Table 2, September 22, 2015, http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_11.pdf.

Components of Analysis

1. adjusted income loss in past years
2. adjusted income loss in future years
3. stock options loss in past years
4. stock options loss in future years
5. health insurance
6. household services in past years
7. household services in future years

Earnings History

Year	W-2 Earnings ⁴
1998	\$650,366
1999	1,162,623
2000	433,309
2001*	823,248

* date of death: September 11

Earnings Base

\$748,766 in 2001 dollars

[based on average earnings for years 1998 through 2000]

4

plaintiff's federal income tax returns and W-2 Wage and Tax Statements, 1998-2001

Projected Earnings Past Years

Year	Yearly Increase ⁵	Projected Yearly Earnings
2001	-	\$748,766
2002	3.7%	776,470
2003	2.1%	792,776
2004	3.0%	816,560
2005	1.2%	826,358
2006	4.7%	865,197
2007	2.4%	885,962
2008	2.5%	908,111
2009	-1.5%	894,489
2010	1.8%	910,590
2011	1.9%	927,891
2012	1.2%	939,026
2013	0.2%	940,904
2014	0.7%	947,490
2015	1.2%	958,860
2016	0.8%	966,531

5

U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics (OES), Median Hourly Earnings, Sales and Related Occupations, <http://www.bls.gov/oes>, percent calculated by author.

Adjustments to Earnings

	Three Children	Two Children
Gross Earnings Base	100.00%	100.00%
x Worklife Adjustment	91.30%	91.30%
x (1 - 4.5% unemployment factor) ⁶	95.50%	95.50%
= Adjusted Earnings Base	87.19%	87.19%
x (1 - 5%, 6% personal consumption) ⁷	95.00%	94.00%
= Adjusted Income Factor	82.83%	81.96%

	One Child	All Children Emancipated
Gross Earnings Base	100.00%	100.00%
x Worklife Adjustment	91.30%	91.30%
x (1 - 4.5% unemployment factor) ⁶	95.50%	95.50%
= Adjusted Earnings Base	87.19%	87.19%
x (1 - 7%, 8% personal consumption) ⁷	93.00%	92.00%
= Adjusted Income Factor	81.09%	80.22%

6

U.S. Dept of Labor, Bureau of Labor Statistics, Labor Force Statistics including the National Unemployment Rate (Current Population Survey - CPS), unemployment rate by age, all males, www.bls.gov/cps, average calculated by author; and State of New Jersey Department of Labor and Workforce Development, *Figuring Out Your Benefit Amount: How much can you collect?*, <http://lwd.state.nj.us/labor/ui/calc/figbenamt.html>, and *Maximum Benefit Rates and Taxable Wage Base Changes*, December 30, 2015, http://lwd.state.nj.us/labor/lwdhome/press/2015/20151230_BenefitRates.html.

7

U.S. Department of Labor, Bureau of Labor Statistics, Consumer Expenditure Survey, percent calculated by the author.

Adjusted Income Loss Past Years

Year	Portion of Year	Estimated Gross Earnings	Employer 401(k) Match ⁸	Adjusted Income $\{(2) \times [(3) + (4)] \times 82.83\%\}$
(1)	(2)	(3)	(4)	(5)
2002	100%	\$ 776,470	\$ 5,500	\$ 647,706
2003	100%	792,776	6,000	661,626
2004	100%	816,560	6,500	681,740
2005	100%	826,358	7,000	690,271
2006	100%	865,197	7,500	722,855
2007	100%	885,962	7,750	740,261
2008	100%	908,111	7,750	758,608
2009	100%	894,489	8,250	747,739
2010	100%	910,590	8,250	761,075
2011	100%	927,891	8,250	775,406
2012	100%	939,026	8,500	784,836
2013	100%	940,904	8,750	786,598
2014	100%	947,490	8,750	792,054
2015	100%	958,860	9,000	801,679
2016	75%	966,531	9,000	606,024
Total:				\$ 10,958,478

8

Form 11-K - Oracle Corporation, For the fiscal year ended December 31, 2001; Form 10-K - Oracle Corporation, For the fiscal year ended May 31, 2016; Oracle Corporation paystub, period ending November 15, 2001; and IRS Publication - Cost-of-Living Adjustments for Retirement Items, https://www.irs.gov/pub/irs-tege/cola_table.pdf.

Future Years Yearly Increase & Present Value

Growth Rate: 3.9%⁹
Discount Rate: 4.0%¹⁰

9

U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics (OES), Median Hourly Earnings, All Occupations, <http://www.bls.gov/oes>, percent calculated by author; and Principal Economic Assumptions, *2016 Annual Report to the Board of Trustees of the Federal Old-age and Survivors Insurance and Disability Insurance Trust Funds*, Table V.B1,http://www.ssa.gov/oact/tr/2016/V_B_econ.html.

10

Bond Yields and Interest Rates, 1947-2015, *Economic Report of the President*, February 2016, Table B-25, <http://www.gpo.gov/fdsys/pkg/ERP-2016/pdf/ERP-2016.pdf>, the Board of Governors of the Federal Reserve System, <http://www.federalreserve.gov/> and other publicly available data on interest rates.

Adjusted Income Loss Future Years

Year	Portion of Year	Gross Earnings [@ 3.9%]	Employer 401(k) Match ^a [@ 2.6%]	Adjusted Income { (2) x [(3) + (4)] x AIF } ^b	Present Value [@ 4.0%]
(1)	(2)	(3)	(4)	(5)	(6)
2016	25%	\$ 966,531	\$ 9,000	\$ 202,008	\$ 202,008
2017	100%	1,004,226	9,234	839,449	807,162
2018	100%	1,043,391	9,474	872,088	806,294
2019	100%	1,084,083	9,720	905,997	805,428
2020	100%	1,126,362	9,973	931,439	796,198
2021	100%	1,170,290	10,232	967,556	795,261
2022	100%	1,215,931	10,498	995,472	786,736
2023	100%	1,263,353	10,771	1,033,187	785,137
2024	100%	1,312,624	11,052	1,062,082	776,053
2025	100%	1,363,816	11,339	1,103,149	775,058
2026	100%	1,417,005	11,634	1,146,054	774,233
2027	100%	1,472,268	11,936	1,190,628	773,410
2028	100%	1,529,686	12,246	1,236,938	772,588
2029	100%	1,589,344	12,565	1,285,051	771,769
2030	100%	1,651,328	12,892	1,335,037	770,951
2031	100%	1,715,730	13,227	1,386,969	770,135
2032	100%	1,782,644	13,571	1,440,923	769,321
2033	100%	1,852,167	13,923	1,496,978	768,508
2034	100%	1,924,401	14,285	1,555,215	767,698
2035	100%	1,999,453	14,657	1,615,719	766,889
2036	100%	2,077,432	15,038	1,678,579	766,082
2037*	51%	2,158,452	15,429	889,382	390,291
Total:					\$ 16,197,209

^a 401(k) employer match increases by long-term inflation rate;

^b AIF: 82.83% (until January 6, 2020); 81.96% (until February 3, 2022);

81.09% (until February 9, 2024); 80.22% thereafter

* decedent's statistical date of retirement: July 3

Stock Options

\$25,645¹¹

[based on average of 1999 and 2001 grants]

Projected Stock Option Grants Past Years

Grant Date ¹²	Options Awarded ¹³	Grant Price
June 4, 2003	2,049	\$ 12.52
June 3, 2005	2,210	11.61
June 4, 2007	1,414	18.13
June 3, 2009	1,364	18.80
June 3, 2011	844	30.37
June 4, 2013	785	32.66
June 4, 2015	579	42.94

11

Oracle Corporation, Options and Awards Summary for Todd Beamer, dated September 27, 2001.

12

For purposes of this analysis, we estimate that Mr. Beamer would have received stock grants biennially, based on the frequency of his past awards. [SOURCE: Oracle Corporation, Options and Awards Summary for Todd Beamer, dated September 27, 2001.]

13

The number of options awarded is calculated by dividing the base value of past and future stock options grants (\$25,645) by the grant price.

Stock Option Loss Past Years

Grant Date	Options Awarded	Projected Value ¹⁴	Adjusted Value*
June 4, 2003	2,049	\$ 23,408	\$ 22,238
June 3, 2005	2,210	41,765	39,677
June 4, 2007	1,414	32,093	30,488
June 3, 2009	1,364	29,376	27,907
June 3, 2011	844	11,010	10,460
June 4, 2013	785	9,912	9,416
June 4, 2015	579	5,714	5,428
Total:			\$ 145,614

* adjusted by 5% personal consumption

14

But for Mr. Beamer's death, he would have received biennial stock option grants of Oracle Corp. stock, beginning in 2003. We assume a 10-year expiration date from the date of grant. Furthermore, we assume a 4-year vesting period, whereby each grant vests in a 25% tranche.

In years 2003 and 2005, we value the projected stock option grants by calculating the six (6) year average price from the time the stock grants are 100% vested through the expiration date.

To value projected stock option grants from 2007 and thereafter, we apply the Black-Scholes Option Pricing Model. Our measure of stock volatility is the standard deviation of the historical price performance of Oracle Corp. stock based on monthly returns for data encompassing the period July 1, 2006, to August 1, 2016. The dividend yield on Oracle Corp. stock was 1.46% and the closing market price of the stock was \$41.07 per share on August 24, 2016. We project the granting of options with a 10-year term and use 1.56% as the relevant risk-free rate of interest based upon the yield on 10-year U.S. Treasury securities as of August 24, 2016. [SOURCE: [http://finance.yahoo.com.\]](http://finance.yahoo.com.)

Stock Option Loss Future Years

Grant Year	Options Awarded ¹⁵	Projected Value	Adjusted Value*	Present Value [@ 4.0%]
2017	624	\$ 6,625	\$ 6,294	\$ 6,052
2019	624	6,625	6,294	5,595
2021	624	6,625	6,228	5,119
2023	624	6,625	6,161	4,682
2025	624	6,625	6,095	4,282
2027	624	6,625	6,095	3,959
2029	624	6,625	6,095	3,660
2031	624	6,625	6,095	3,384
2033	624	6,625	6,095	3,129
2035	624	6,625	6,095	2,893
2037	624	6,625	6,095	2,675
Total:				\$ 45,430

* adjusted by personal consumption: 5% until 2020, 6% until 2022, 7% until 2024, and 8% thereafter

15

The number of options awarded is calculated by dividing the base value of assumed future stock options grants (\$25,645) by the share price on August 24, 2016 (\$41.07).

Health Insurance¹⁶

Family: \$14,470

Single: \$5,334 (after 1/9/28)

Future Years Yearly Increase

5.0%¹⁷

Future Years Discount Rate

4.0%

16

Employer Health Benefits, 2015 Annual Survey, The Kaiser Family Foundation and Health Research & Educational Trust, <http://files.kff.org/attachment/report-2015-employer-health-benefits-survey>, Exhibit 1.3.

17

ibid., Exhibit 1.11.

Health Insurance Loss Future Years

Year	Portion of Year	Health Insurance [@ 5.0%]	Present Value [@ 4.0%]
2016	25%	\$ 3,798	\$ 3,950
2017	100%	15,953	14,750
2018	100%	16,751	14,891
2019	100%	17,588	15,035
2020	100%	18,468	15,179
2021	100%	19,391	15,325
2022	100%	20,361	15,472
2023	100%	21,379	15,621
2024	100%	22,448	15,771
2025	100%	23,570	15,923
2026	100%	24,749	16,076
2027	100%	25,986	16,231
2028 ^a	100%	15,305	9,192
2029	100%	10,561	6,099
2030	100%	11,089	6,157
2031	100%	11,643	6,217
2032	100%	12,226	6,276
2033	100%	12,837	6,337
2034	100%	13,479	6,398
2035	100%	14,153	6,459
2036	100%	14,860	6,521
2037 ^b	51%	7,958	3,358
Total:		\$ 237,239	

^a youngest child reaches age 26: January 9

^b statistical date of retirement: July 3

Household Services

Hours

Age of Youngest Child	Age of Decedent	Weekly Hours ¹⁸	Yearly Hours	Time Period
under 13	under 65	13.43	698	09/11/01 - 01/08/15
13 to 17	under 65	14.41	749	01/09/15 - 01/08/20
18 & over	under 65	14.08	732	01/09/20 - 11/23/33
18 & over	65 to 74	13.02	677	11/24/33 - 11/23/43
18 & over	75 & over	10.97	570	11/24/43 - 09/11/47

18

The Dollar Value of a Day, Time Diary Analysis, 2014 Dollar Valuation, Expectancy Data Corp., Shawnee Mission, KS, 2015, Table 2, 5, & 8; and U.S. Department of Commerce, Current Population Reports, *Americans with Disabilities: 2010*, Household Economic Studies, Series P-70-131, Table D-1, issued July 2012.

Wage Rate

Year	Yearly Increase ¹⁹	Estimated Hourly Rate
2001	-	\$ 14.88
2002	2.3%	15.22
2003	1.7%	15.48
2004	2.2%	15.82
2005	2.3%	16.18
2006	3.3%	16.72
2007	3.4%	17.28
2008	3.1%	17.82
2009	2.4%	18.25
2010	2.0%	18.61
2011	1.8%	18.95
2012	0.8%	19.10
2013	1.0%	19.29
2014 ²⁰	1.3%	19.54
2015	1.8%	19.89
2016	1.2%	20.13

19

U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics (OES), Median Hourly Earnings, All Occupations, <http://www.bls.gov/oes>, percent calculated by author.

20

The Dollar Value of a Day, Time Diary Analysis, 2014 Dollar Valuation, Expectancy Data Corp., Shawnee Mission, KS, 2015, Tables 2 and 229.

Loss of Household Services Past Years

Year (1)	Portion of Year (2)	Yearly Hours (3)	Hourly Wage (4)	Total Value [(2) x (3) x (4)] (5)
2001	30%	698	\$ 14.88	\$ 3,115
2002	100%	698	15.22	10,622
2003	100%	698	15.48	10,803
2004	100%	698	15.82	11,040
2005	100%	698	16.18	11,294
2006	100%	698	16.72	11,667
2007	100%	698	17.28	12,064
2008	100%	698	17.82	12,438
2009	100%	698	18.25	12,736
2010	100%	698	18.61	12,991
2011	100%	698	18.95	13,225
2012	100%	698	19.10	13,331
2013	100%	698	19.29	13,464
2014	100%	698	19.54	13,639
2015 ^a	100%	748	19.89	14,879
2016	75%	749	20.13	11,308
			Total:	\$188,615

^a youngest child reaches age 13: January 9

Yearly Increase & Present Value

Growth Rate: 3.9%
Discount Rate: 4.0%

Loss of Household Services Future Years

Year	Portion of Year	Yearly Hours	Hourly Wage [@ 3.9%]	Total Value [(2) x (3) x (4)]	Present Value [@ 4.0%]
(1)	(2)	(3)	(4)	(5)	(6)
2016	25%	749	\$ 20.13	\$ 3,769	\$ 3,769
2017	100%	749	20.92	15,666	15,063
2018	100%	749	21.73	16,277	15,049
2019	100%	749	22.58	16,911	15,034
2020 ^a	100%	732	23.46	17,184	14,689
2021	100%	732	24.37	17,846	14,668
2022	100%	732	25.32	18,542	14,654
2023	100%	732	26.31	19,265	14,640
2024	100%	732	27.34	20,016	14,626
2025	100%	732	28.40	20,797	14,612
2026	100%	732	29.51	21,608	14,598
2027	100%	732	30.66	22,451	14,584
2028	100%	732	31.86	23,326	14,570
2029	100%	732	33.10	24,236	14,556
2030	100%	732	34.39	25,181	14,542
2031	100%	732	35.73	26,163	14,528
2032	100%	732	37.13	27,184	14,514
2033 ^b	100%	727	38.58	28,031	14,390

Year	Portion of Year	Yearly Hours	Hourly Wage [@ 3.9%]	Total Value [(2) x (3) x (4)]	Present Value [@ 4.0%]
(1)	(2)	(3)	(4)	(5)	(6)
2034	100%	677	40.08	27,134	13,394
2035	100%	677	41.64	28,203	13,386
2036	100%	677	43.27	29,303	13,373
2037	100%	677	44.96	30,446	13,361
2038	100%	677	46.71	31,633	13,348
2039	100%	677	48.53	32,867	13,335
2040	100%	677	50.42	34,149	13,322
2041	100%	677	52.39	35,480	13,309
2042	100%	677	54.43	36,864	13,297
2043 ^b	100%	667	56.56	37,695	13,073
2044	100%	570	58.76	33,494	11,169
2045	100%	570	61.05	34,821	11,166
2046	100%	570	63.43	36,180	11,155
2047 ^c	70%	570	65.91	26,313	7,801
					Total: \$ 427,572

^a youngest child reaches age 18: January 9^b decedent's age 65 and 75: November 24^c decedent's statistical date of death: September 11

Summary

Past Years	Future Years	Total	Component of Analysis
\$ 10,958,478	\$ 16,197,209	\$ 27,155,686	adjusted income
145,614	45,430	191,044	stock option income
-	237,239	237,239	health insurance
188,615	427,572	616,187	household services
\$ 11,292,707	\$ 16,907,450	\$ 28,200,157	total present value of loss



August 29, 2016

Dorothea M. Capone, Esq.
BAUMEISTER & SAMUELS, P.C.
140 Broadway, 46th Floor
New York, New York 10005

Re: Edward Felt

Dear Ms. Capone:

Sobel Tinari Economics Group was retained to evaluate economic damages as a result of the death of Edward Felt. Background facts regarding the decedent and family were provided in a packet of documents pursuant to this matter.

Sobel Tinari Economics had been previously retained by Baumeister & Samuels, P.C. to evaluate decedent's economic damages. This analysis serves as an update, as of this date, of the present value of economic losses incurred by decedent's family members in this matter. Within a reasonable degree of economic certainty, and based on the facts and analysis attached to this letter, it is our professional opinion that the total present value of the past and future pecuniary damages resulting from the death of Edward Felt amounts to **\$8,026,125**.

This amount does not take into account the ramifications of intangible, non-economic losses such as human suffering, love, emotional feelings, or consortium that may have been experienced by decedent and decedent's family members.

The detailed calculations are shown in the tables attached to this letter.

The preceding findings are based on information provided to us as of this date. They are subject to revision should additional information be forthcoming that would change any facts or assumptions upon which this analysis rests.

Reply to:

293 Eisenhower Parkway, Suite 190
Livingston, NJ 07039
Tel 973.992.1800
Fax 973.994.1571

www.sobeltinariconomics.com

112 West 34th Street, 18th Floor
New York, NY 10120
Tel 212.201.0938
Fax 212.201.0937

BAUMEISTER & SAMUELS, P.C. / Felt

August 29, 2016

page 2

We trust that you will find the report clear and informative. Should you have any additional questions, or wish to explore any aspect of our findings in more detail, please do not hesitate to contact us. Our current Qualifications Profiles are appended.

Lastly, we certify that the Sobel Tinari Economics Group has received, thus far, \$0 compensation for preparation of an updated report for Edward Felt. As of this date, an outstanding balance of \$2,000 is due. Our services are billed according to our Professional Fees, a copy of which is attached to this letter.

Sincerely,



Kristin Kucsma, M.A.



Kenneth T. Betz, MBA, M.A.

Edward Felt

born: November 9, 1959

died: September 11, 2001

age: 41.84 years

statistical retirement: 68.94 years (October 17, 2028)¹

worklife ratio: 87.3%²

life expectancy: 79.54 years (May 24, 2039)³

residence: Matawan, New Jersey

education: Master's degree

employer: BEA Systems

position: Technical Director, Computer
Engineer

spouse: Sandra (born: 1/5/58)

spouse's life expectancy: 83.28 years (April 17, 2041)³

children: Adrienne (born: 11/8/86)

Kathryn (born: 4/12/90)

¹

Gary R. Skoog and James E. Ciecka, "Probability Mass Functions for Years to Final Separation from the Labor Force Induced by the Markov Model," *Journal of Forensic Economics*, 16(1), 2003, pp. 51-86, by interpolation.

²

Gary R. Skoog, James E. Ciecka and Kurt V. Krueger, "The Markov Process Model of Labor Force Activity: Extended Tables of Central Tendency, Shape, Percentile Points, and Bootstrap Standard Errors", *Journal of Forensic Economics*, Volume 22, No. 2, August 2011, pp. 183-190, by interpolation.

³

National Vital Statistics Reports, Volume 64, No. 11, United States Life Tables, 2011, Tables 2 and 3, September 22, 2015, http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_11.pdf.

Components of Analysis

1. adjusted income loss in past years
2. adjusted income loss in future years
3. stock option income loss in past years
4. stock option income loss in future years
5. cost of health insurance
6. household services

Earnings History⁴

Year	Earnings ⁵
1996	\$110,915^
1997	121,283
1998	126,951
1999	143,808
2000	178,453
2001*	132,947

⁴ includes \$25,759 from Novell, Inc.

* date of death: September 11

Earnings Base

\$178,453 in 2000 dollars
[based on actual 2000 earnings]

⁴

Excludes stock option income.

⁵

plaintiff's W-2 Wage and Tax Statements, 1996-2001

Projected Earnings Past Years

Year	Yearly Increase ⁶	Projected Yearly Earnings
2000	-	\$178,453
2001	4.8%	187,019
2002	4.5%	195,435
2003	5.6%	206,379
2004	5.0%	216,698
2005	4.3%	226,016
2006	4.3%	235,735
2007	4.3%	245,872
2008	3.8%	255,215
2009	1.9%	260,064
2010	2.4%	266,305
2011	1.6%	270,566
2012	1.1%	273,543
2013	1.8%	278,466
2014	1.7%	283,200
2015	1.3%	286,882
2016	1.5%	291,185

6

U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics (OES), Median Hourly Earnings, Management Occupations, <http://www.bls.gov/oes>, percent calculated by author.

Adjustments to Earnings

	Two Children	One Child	All Children Emancipated
Gross Income Base	100.00%	100.00%	100.00%
x Worklife Adjustment	87.30%	87.30%	87.30%
x (1 - 3.8% unemployment factor) ⁷	96.20%	96.20%	96.20%
= Adjusted Earnings Base	83.98%	83.98%	83.98%
x (1 - 15%/19%/26% personal consumption) ⁸	85.00%	81.00%	74.00%
= Adjusted Income Factor	71.39%	68.03%	62.15%

7

U.S. Dept of Labor, Bureau of Labor Statistics, Labor Force Statistics including the National Unemployment Rate (Current Population Survey - CPS), unemployment rate by age, all males, www.bls.gov/cps, average calculated by author; and State of New Jersey Department of Labor and Workforce Development, *Figuring Out Your Benefit Amount: How much can you collect?*, <http://lwd.state.nj.us/labor/ui/calc/figbenamt.html>, and *Maximum Benefit Rates and Taxable Wage Base Changes*, December 30, 2015, http://lwd.state.nj.us/labor/lwdhome/press/2015/20151230_BenefitRates.html.

8

U.S. Department of Labor, Bureau of Labor Statistics, Consumer Expenditure Survey, percent calculated by the author.

Adjusted Income Loss Past Years

Year	Portion of Year	Estimated Gross Earnings	Employer 401(k) Match ⁹	Adjusted Income [(2) x {(3) + (4)} x AIF] ^a
(1)	(2)	(3)	(4)	(4)
2001	100%	\$ 54,072*	\$ 0	\$ 38,602
2002	100%	195,435	3,000	141,663
2003	100%	206,379	3,000	149,476
2004	100%	216,698	3,000	156,843
2005	100%	226,016	3,000	163,495
2006	100%	235,735	3,000	170,433
2007	100%	245,872	3,000	177,669
2008	100%	255,215	5,000	184,456
2009	100%	260,064	8,250	182,534
2010	100%	266,305	8,250	186,780
2011	100%	270,566	8,250	189,679
2012	100%	273,543	8,500	170,165
2013	100%	278,466	8,750	178,505
2014	100%	283,200	8,750	181,447
2015	100%	286,882	9,000	183,891
2016	75%	291,185	9,000	139,924
Total:				\$2,595,561

* projected earnings (\$187,019) less actual earnings (\$132,947)

^a AIF: 71.39% (until November 8, 2008), 68.03% (until April 12, 2012), and 62.15% thereafter

9

Form 10-K, BEA Systems, Inc., for the fiscal years 2001-2008; Form 10-K, Oracle corporation, for the fiscal years 2009-2016; Internal Revenue Service, Cost-of-Living Adjusts for Retirement Items, https://www.irs.gov/pub/irs-tege/cola_table.pdf.

Future Years Yearly Increase & Present Value

Growth Rate: 3.9%¹⁰
Discount Rate: 3.25%¹¹

10

U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics (OES), Median Hourly Earnings, All Occupations, <http://www.bls.gov/oes>, percent calculated by author; and Principal Economic Assumptions, *2016 Annual Report to the Board of Trustees of the Federal Old-age and Survivors Insurance and Disability Insurance Trust Funds*, Table V.B1,http://www.ssa.gov/oact/tr/2016/V_B_econ.html.

11

Bond Yields and Interest Rates, 1947-2015, *Economic Report of the President*, February 2016, Table B-25, <http://www.gpo.gov/fdsys/pkg/ERP-2016/pdf/ERP-2016.pdf>, the Board of Governors of the Federal Reserve System, <http://www.federalreserve.gov/> and other publicly available data on interest rates.

Adjusted Income Loss Future Years

Year	Portion of Year	Gross Earnings [@ 3.9%]	Employer 401(k) Match [@ 2.6%] ^a	Adjusted Income [(2) x {(3) + (4)} x 62.15%]	Present Value [@ 3.25%]
(1)	(2)	(3)	(4)	(5)	(6)
2016	25%	\$ 291,185	\$ 9,000	\$ 46,641	\$ 46,641
2017	100%	302,541	9,234	193,768	187,669
2018	100%	314,340	9,474	201,251	188,781
2019	100%	326,600	9,720	209,023	189,899
2020	100%	339,337	9,973	217,096	191,026
2021	100%	352,571	10,232	225,482	192,160
2022	100%	366,321	10,498	234,194	193,301
2023	100%	380,608	10,771	243,242	194,450
2024	100%	395,452	11,052	252,642	195,607
2025	100%	410,874	11,339	262,405	196,772
2026	100%	426,898	11,634	272,548	197,944
2027	100%	443,547	11,936	283,083	199,124
2028 ^b	80%	460,846	12,246	235,221	160,249
Total:					\$ 2,333,623

^a 401(k) employer matches increased by long-term inflation rate;

^b decedent's statistical date of retirement: October 17

Stock Options

\$193,581¹²
 [based on an average of 1997-2001 grants]

Projected Stock Option Grants Past Years

Grant Date ¹³	Options Awarded ¹⁴	Grant Price
July 1, 2002	23,333	\$ 8.30
July 1, 2003	17,031	11.37
July 1, 2004	17,781	10.89
July 1, 2005	15,801	12.25
July 3, 2006	14,179	13.65
July 2, 2007	10,542	18.36
July 1, 2008	9,854	19.64
July 1, 2009	9,634	20.09
July 1, 2010	9,634	20.09
July 1, 2011	6,236	31.04
July 2, 2012	6,861	28.22
July 1, 2013	6,725	28.79
July 1, 2014	4,900	39.51
July 1, 2015	4,904	39.47
July 1, 2016	4,738	40.86

12

BEA Systems, Inc., Exercisable Options, Closing Statement for Edward P. Felt, dated September 26, 2001

13

For the purpose of this analysis, we estimate that Mr. Felt would have received annual stock grants based on the frequency of his past awards. [SOURCE: *ibid.*]

14

Because BEA was acquired by Oracle Corporation in a 2008 stock acquisition, the number of options awarded is calculated by dividing the base value of past and future stock options grants (\$25,645) by the grant price based on Oracle's stock price on the date of grant. [SOURCE: Form 10-K, Oracle Corporation, Period Ending 05/31/08.]

Stock Option Loss Past Years

Grant Date	Options Awarded	Projected Value ¹⁵	Adjusted Value*
July 1, 2002	23,333	\$ 312,014	\$ 265,212
July 1, 2003	17,031	216,883	184,351
July 1, 2004	17,781	284,116	241,499
July 1, 2005	15,801	292,792	248,873
July 3, 2006	14,179	282,592	240,203
July 2, 2007	10,542	236,568	201,083
July 1, 2008	9,854	206,200	174,033
July 1, 2009	9,634	195,996	158,757
July 1, 2010	9,634	195,055	157,995
July 1, 2011	6,236	79,082	64,056
July 2, 2012	6,861	100,599	76,415
July 1, 2013	6,725	98,254	72,708
July 1, 2014	4,900	50,327	37,242
July 1, 2015	4,904	52,451	38,814
July 1, 2016	4,738	50,321	37,238
Total:			\$2,198,477

* adjusted downwards for personal consumption: 15% (until November 8, 2008), 19% (until April 12, 2012), and 26% thereafter.

15

But for Mr. Felt's death, he would have continued to receive annual stock option grants beginning in 2002. We assume a 10-year expiration date from the date of grant. Furthermore, we assume a 4-year vesting period, whereby each grant vests in a 25% tranche.

From 2002 to 2006, we value the projected stock option grants by calculating the six (6) year average price from the time the stock grants are 100% vested through the expiration date.

To value projected stock option grants from 2007 and thereafter, we apply the Black-Scholes Option Pricing Model. Our measure of stock volatility is the standard deviation of the historical price performance of Oracle Corp. stock based on monthly returns for data encompassing the period July 1, 2006, to August 1, 2016. The dividend yield on Oracle Corp. stock was 1.46% and the closing market price of the stock was \$41.07 per share on August 24, 2016. We project the granting of options with a 10-year term and use 1.56% as the relevant risk-free rate of interest based upon the yield on 10-year U.S. Treasury securities as of August 24, 2016. [SOURCE: [http://finance.yahoo.com.\]](http://finance.yahoo.com.)

Stock Option Loss Future Years

Grant Year	Options Awarded ¹⁶	Projected Value	Adjusted Value	Present Value [@ 3.25%]
2017	4,713	\$ 50,008	\$ 37,006	\$ 35,841
2018	4,713	50,008	37,006	34,713
2019	4,713	50,008	37,006	33,620
2020	4,713	50,008	37,006	32,562
2021	4,713	50,008	37,006	31,537
2022	4,713	50,008	37,006	30,544
2023	4,713	50,008	37,006	29,583
2024	4,713	50,008	37,006	28,652
2025	4,713	50,008	37,006	27,750
2026	4,713	50,008	37,006	26,876
2027	4,713	50,008	37,006	26,030
2028	4,713	50,008	37,006	25,211
Total:				\$362,920

16

The number of options awarded is calculated by dividing the base value of assumed future stock options grants (\$193,581) by the share price on August 24, 2016 (\$41.07).

Health Insurance

\$5,334 (single), in 2015 dollars¹⁷

Future Years Yearly Increase

5.0%¹⁸

Future Years Discount Rate

3.25%

17

Employer Health Benefits, 2015 Annual Survey, The Kaiser Family Foundation and Health Research & Educational Trust, <http://files.kff.org/attachment/report-2015-employer-health-benefits-survey>, Exhibit 1.3

18

ibid., Exhibit 1.11

Health Insurance Loss Future Years

Year	Portion of Year	Health Insurance [@ 5.0%]	Present Value [@ 3.25%]
2016	25%	\$ 1,400	\$ 1,400
2017	100%	5,881	5,696
2018	100%	6,175	5,792
2019	100%	6,484	5,890
2020	100%	6,808	5,990
2021	100%	7,148	6,092
2022	100%	7,505	6,195
2023	100%	7,881	6,300
2024	100%	8,275	6,407
2025	100%	8,689	6,515
2026	100%	9,123	6,626
2027	100%	9,579	6,738
2028 ^a	80%	8,046	5,482
Total:		\$ 75,123	

^a statistical date of retirement: October 17

Household Services

Hours

Age of Youngest Child	Age of Decedent	Weekly Hours ¹⁹	Yearly Hours	Time Period
under 13	under 65	11.83	615	09/11/01 - 04/11/03
13 to 17	under 65	12.78	665	04/12/03 - 04/11/08
18 & over	under 65	12.90	671	04/12/08 - 11/08/24
18 & over	65 to 74	11.93	620	11/09/24 - 11/08/34
18 & over	75 & over	10.05	523	11/09/34 - 05/24/39

19

The Dollar Value of a Day, Time Diary Analysis, 2014 Dollar Valuation, Expectancy Data Corp., Shawnee Mission, KS, 2015, Table 3, 6, & 9; and U.S. Department of Commerce, Current Population Reports, *Americans with Disabilities: 2010*, Household Economic Studies, Series P-70-131, Table D-1, issued July 2012.

Wage Rate

Year	Yearly Increase ²⁰	Estimated Hourly Rate
2001	-	\$ 14.99
2002	2.3%	15.33
2003	1.7%	15.60
2004	2.2%	15.94
2005	2.3%	16.31
2006	3.3%	16.84
2007	3.4%	17.42
2008	3.1%	17.96
2009	2.4%	18.39
2010	2.0%	18.75
2011	1.8%	19.09
2012	0.8%	19.24
2013	1.0%	19.44
2014 ²¹	1.3%	19.69
2015	1.8%	20.04
2016	1.2%	20.29

20

U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics (OES), Median Hourly Earnings, All Occupations, <http://www.bls.gov/oes>, percent calculated by author.

21

The Dollar Value of a Day, Time Diary Analysis, 2014 Dollar Valuation, Expectancy Data Corp., Shawnee Mission, KS, 2015, Tables 3 and 229.

Loss of Household Services Past Years

Year (1)	Portion of Year (2)	Yearly Hours (3)	Hourly Wage (4)	Total Value [(2) x (3) x (4)] (5)
2001 ^a	30%	615	\$ 14.99	\$ 2,766
2002	100%	615	15.33	9,433
2003 ^b	100%	651	15.60	10,148
2004	100%	665	15.94	10,592
2005	100%	665	16.31	10,836
2006	100%	665	16.84	11,193
2007	100%	665	17.42	11,574
2008 ^b	100%	669	17.96	12,013
2009	100%	671	18.39	12,334
2010	100%	671	18.75	12,581
2011	100%	671	19.09	12,807
2012	100%	671	19.24	12,909
2013	100%	671	19.44	13,039
2014	100%	671	19.69	13,208
2015	100%	671	20.04	13,446
2016	75%	671	20.29	10,205
Ttotal:				\$ 179,086

^a date of death: September 11

^b Kathryn attains ages 13 and 18: April 12

Yearly Increase & Present Value

Growth Rate: 3.9%
Discount Rate: 4.0%

Loss of Household Services Future Years

Year	Portion of Year	Yearly Hours	Hourly Wage [@ 3.9%]	Total Value [(2) x (3) x (4)]	Present Value [@ 4.00%]
(1)	(2)	(3)	(4)	(5)	(6)
2016	25%	671	\$ 20.29	\$ 3,402	\$ 3,402
2017	100%	671	21.08	14,138	13,594
2018	100%	671	21.90	14,689	13,581
2019	100%	671	22.75	15,262	13,568
2020	100%	671	23.64	15,857	13,555
2021	100%	671	24.56	16,476	13,542
2022	100%	671	25.52	17,118	13,529
2023	100%	671	26.51	17,786	13,516
2024 ^a	100%	664	27.55	18,286	13,361
2025	100%	620	28.62	17,760	12,478
2026	100%	620	29.74	18,453	12,466
2027	100%	620	30.90	19,173	12,454
2028	100%	620	32.10	19,920	12,442
2029	100%	620	33.36	20,697	12,430
2030	100%	620	34.66	21,504	12,418
2031	100%	620	36.01	22,343	12,406
2032	100%	620	37.41	23,214	12,394
2033	100%	620	38.87	24,120	12,382

Year	Portion of Year	Yearly Hours	Hourly Wage [@ 3.9%]	Total Value [(2) x (3) x (4)]	Present Value [@ 4.00%]
(1)	(2)	(3)	(4)	(5)	(6)
2034 ^a	100%	607	40.39	24,507	12,097
2035	100%	523	41.96	21,928	10,408
2036	100%	523	43.60	22,783	10,398
2037	100%	523	45.30	23,672	10,388
2038	100%	523	47.07	24,595	10,378
2039 ^b	40%	523	48.90	10,222	4,147
Total:				\$281,336	

^a decedent's 65th and 75th birthday: November 9

^b decedent's statistical date of death: May 24

Summary

Past Years	Future Years	Total	Component of Analysis
\$ 2,595,561	\$ 2,333,623	\$ 4,929,184	adjusted income loss
2,198,477	362,920	2,561,397	stock option income loss
0	75,123	75,123	cost of health insurance
179,086	281,336	460,421	household services
<u>\$ 4,973,123</u>	<u>\$ 3,053,001</u>	<u>\$ 8,026,125</u>	<u>total present value of loss</u>



August 29, 2016

Dorothea M. Capone, Esq.
BAUMEISTER & SAMUELS, P.C.
140 Broadway, 46th Floor
New York, New York 10005

Re: Bryan Jack

Dear Ms. Capone:

Sobel Tinari Economics Group was retained to evaluate economic damages as a result of the death of Bryan Jack. Background facts regarding the decedent and family were provided in a packet of documents pursuant to this matter.

Sobel Tinari Economics had been previously retained by Baumeister & Samuels, P.C. to evaluate decedent's economic damages. This analysis serves as an update, as of this date, of the present value of economic losses incurred by decedent's family members in this matter. Within a reasonable degree of economic certainty, and based on the facts and analysis attached to this letter, it is our professional opinion that the total present value of the past and future pecuniary losses resulting from the death of Bryan Jack amounts to **\$3,174,151**.

This amount does not take into account the ramifications of intangible, non-economic losses such as human suffering, love, emotional feelings, or consortium that may have been experienced by decedent and decedent's family members.

The detailed calculations are shown in the tables attached to this letter.

The preceding findings are based on information provided to us as of this date. They are subject to revision should additional information be forthcoming that would change any facts or assumptions upon which this analysis rests.

Reply to:

293 Eisenhower Parkway, Suite 190
Livingston, NJ 07039
Tel 973.992.1800
Fax 973.994.1571

www.sobeltinariconomics.com

112 West 34th Street, 18th Floor
New York, NY 10120
Tel 212.201.0938
Fax 212.201.0937

BAUMEISTER & SAMUELS, P.C. / Jack

August 29, 2016

page 2

We trust that you will find the report clear and informative. Should you have any additional questions, or wish to explore any aspect of our findings in more detail, please do not hesitate to contact us. Our current Qualifications Profiles are appended.

Lastly, we certify that the Sobel Tinari Economics Group has received, thus far, \$0 compensation for preparation of an updated report for Bryan Jack. As of this date, an outstanding balance of \$2,000 is due. Our services are billed according to our Professional Fees, a copy of which is attached to this letter.

Sincerely,



Kristin Kucsma, M.A.



Kenneth T. Betz, MBA, M.A.

Bryan Jack

born: January 3, 1953

died: September 11, 2001

age: 48.69 years

statistical retirement: 69.28 years (April 14, 2022)¹

worklife ratio: 96.2%²

life expectancy: 80.09 years (February 3, 2033)³

residence: Alexandria, Virginia

education: Ph.D. in Economics

employer: Office of the Secretary of Defense

position: Director

part-time employer: George Washington University

position: adjunct professor of economics

spouse: Barbara Rachko (born: 1/22/53)

spouse's life expectancy: 83.64 years (September 10, 2036)³

1

Gary R. Skoog and James E. Ciecka, "Probability Mass Functions for Years to Final Separation from the Labor Force Induced by the Markov Model," *Journal of Forensic Economics*, 16(1), 2003, pp. 51-86, by interpolation.

2

Gary R. Skoog, James E. Ciecka and Kurt V. Krueger, "The Markov Process Model of Labor Force Activity: Extended Tables of Central Tendency, Shape, Percentile Points, and Bootstrap Standard Errors", *Journal of Forensic Economics*, Volume 22, No. 2, August 2011, pp. 183-190, by interpolation.

3

National Vital Statistics Reports, Volume 64, No. 11, United States Life Tables, 2011, Tables 2 and 3, September 22, 2015, http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_11.pdf.

Components of Analysis

1. adjusted full-time income loss in past years
2. adjusted full-time income loss in future years
3. adjusted pension income
4. adjusted part-time income loss in past years
5. adjusted part-time income loss in future years
6. household services in past years
7. household services in future years

Full-Time Earnings History

Year	Earnings ⁴
2000	\$138,039
2001*	135,378

* date of death: September 11

Full-Time Earnings Base

\$138,039 in 2000 dollars

[based on the last full year of earnings in 2000]

4

W-2 Wage and Tax Statements, 2000 & 2001.

Full-Time Projected Earnings Past Years

Year	Yearly Increase ⁵	Projected Yearly Earnings
2000	-	\$138,039
2001	1.85%	140,593
2002	1.85%	143,194
2003	1.85%	145,843
2004	1.85%	148,541
2005	1.85%	151,289
2006	1.85%	154,088
2007	1.85%	156,938
2008	1.85%	159,842
2009	1.85%	162,799
2010	1.85%	165,811
2011	1.85%	168,878
2012	1.85%	172,002
2013	1.85%	175,184
2014	1.85%	178,425
2015	1.85%	181,726
2016	1.85%	185,088

5

Senior Executive Service Salaries & Wages Schedules, U.S. Office of Personnel Management,
<https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/>, compound annual growth rate calculated by economic experts.

Adjustments to Full-Time Earnings

Gross Income Base	100.00%
x Worklife Adjustment	96.20%
= Adjusted Earnings Base	96.20%
x (1 + 5% Thrift Savings Plan) ⁶	105.00%
= Fringe-Adjusted Earnings	101.01%
x (1 - 37% personal consumption) ⁷	63.00%
= Adjusted Income Factor	63.64%

6

Federal Employees Almanac 2016, 63rd Edition, p. 269.

7

The method used to generate personal consumption rates is outlined in a paper entitled "A Preliminary and Simplified Method for Establishing the Personal Consumption Deduction from Decedent-Only Earnings", by Frank D. Tinari, Ph.D. and Stephen B. Levinson, Ph.D., presented at the Eastern Economic Association Annual Conference, National Association of Forensic Economics session, New York City, February 26, 2011, Table 1.

Adjusted Full-Time Income Loss Past Years

Year (1)	Portion of Year (2)	Estimated Gross Earnings (3)	Adjusted Income [(2) x (3) x 63.64%] (4)
2001	100%	\$ 5,215*	\$ 3,319
2002	100%	143,194	91,128
2003	100%	145,843	92,814
2004	100%	148,541	94,531
2005	100%	151,289	96,280
2006	100%	154,088	98,061
2007	100%	156,938	99,876
2008	100%	159,842	101,723
2009	100%	162,799	103,605
2010	100%	165,811	105,522
2011	100%	168,878	107,474
2012	100%	172,002	109,462
2013	100%	175,184	111,487
2014	100%	178,425	113,550
2015	100%	181,726	115,650
2016	75%	185,088	88,343
Total:			\$ 1,532,827

* projected earnings (\$140,593) less actual earnings (\$135,378)

Future Years Yearly Increase & Present Value

Growth Rate: 3.8%⁸
Discount Rate: 2.75%⁹

Adjusted Full-Time Income Loss Future Years

Year	Portion of Year	Gross Earnings [@ 3.8%]	Adjusted Income [(2) x (3) x 63.64%]	Present Value [@ 2.75%]
(1)	(2)	(3)	(4)	(5)
2016	25%	\$ 185,088	\$ 29,448	\$ 29,448
2017	100%	192,121	122,266	118,994
2018	100%	199,422	126,912	120,210
2019	100%	207,000	131,735	121,438
2020	100%	214,866	136,741	122,679
2021	100%	223,031	141,937	123,933
2022*	29%	231,506	42,726	36,308
Total:				\$ 673,009

* decedent's statistical date of retirement: April 14

8

U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics (OES), Median Hourly Earnings, All Occupations, <http://www.bls.gov/oes>, percent calculated by author; and Principal Economic Assumptions, *2016 Annual Report to the Board of Trustees of the Federal Old-age and Survivors Insurance and Disability Insurance Trust Funds*, Table V.B1, http://www.ssa.gov/oact/tr/2016/V_B_econ.html.

9

Bond Yields and Interest Rates, 1947-2015, *Economic Report of the President*, February 2016, Table B-25, <http://www.gpo.gov/fdsys/pkg/ERP-2016/pdf/ERP-2016.pdf>, the Board of Governors of the Federal Reserve System, <http://www.federalreserve.gov/> and other publicly available data on interest rates.

Pension Income

Pension Benefits

1.1% of the "High-3" Average Salary x Years of Service¹⁰

Service Date: June 25, 1978

Years of Service: 43.83

"high 3" Average Salary: \$217,335

projected pension benefits: \$104,784

contributions to pension plan: 0.8% of salary¹¹

Cost-of-Living Adjustment & Present Value

2% annual COLA¹²

Discount Rate: 3.25%

Adjustments to Pension Income

Gross Pension Benefit	100.00%
x (1 - 37% personal consumption)	63.00%
= Adjusted Pension Factor (APF)	63.00%

10

U.S. Office of Personnel Management, Retirement, FERS Information, Computation,
www.opm.gov/retirement-services/fers-information/computation/.

11

Federal Employees Almanac 2016, *op. cit.*, p. 55.

12

Federal Employees Almanac 2016, *op. cit.*, p. 213.

Pension Contributions

Year	Portion of Year	Gross Earnings	Contributions [(2) x (3) x 0.8%]	Present Value [@ 2.75%]
(1)	(2)	(3)	(4)	(5)
2001	100%	\$ 5,215	\$ 42	\$ 42
2002	100%	143,194	1,146	1,146
2003	100%	145,843	1,167	1,167
2004	100%	148,541	1,188	1,188
2005	100%	151,289	1,210	1,210
2006	100%	154,088	1,233	1,233
2007	100%	156,938	1,256	1,256
2008	100%	159,842	1,279	1,279
2009	100%	162,799	1,302	1,302
2010	100%	165,811	1,326	1,326
2011	100%	168,878	1,351	1,351
2012	100%	172,002	1,376	1,376
2013	100%	175,184	1,401	1,401
2014	100%	178,425	1,427	1,427
2015	100%	181,726	1,454	1,454
2016	100%	185,088	1,481	1,481
2017	100%	192,121	1,537	1,496
2018	100%	199,422	1,595	1,511
2019	100%	207,000	1,656	1,527
2020	100%	214,866	1,719	1,542
2021	100%	223,031	1,784	1,558
2022	29%	231,506	537	456
Total:				\$ 27,729

Loss of Pension Income

Year (1)	Portion of Year (2)	Projected Pension Income [@ 2%] (3)	Adjusted Yearly Loss [(2) x (3) x 63.0%] (4)	Present Value [@ 3.25%] (5)
2022	71%	\$ 104,784	\$ 46,870	\$ 38,686
2023	100%	106,879	67,334	53,827
2024	100%	109,017	68,681	53,176
2025	100%	111,197	70,054	52,532
2026	100%	113,421	71,455	51,896
2027	100%	115,689	72,884	51,268
2028	100%	118,003	74,342	50,647
2029	100%	120,363	75,829	50,034
2030	100%	122,771	77,345	49,428
2031	100%	125,226	78,892	48,830
2032	100%	127,731	80,470	48,239
2033*	10%	130,285	8,208	4,765
subtotals:				\$ 553,327
less required contributions:				\$ (27,729)
Total:				\$ 525,598

* statistical date of death: February 3

Part-Time Earnings Base

\$3,500 in 2001 dollars

[based on the W-2 Wage & Tax Statement for year 2001]

Part-Time Projected Earnings Past Years

Year	Yearly Increase ¹³	Projected Yearly Earnings
2001	-	\$ 3,500
2002	2.0%	3,570
2003	1.4%	3,620
2004	3.2%	3,736
2005	2.5%	3,829
2006	3.8%	3,975
2007	3.6%	4,118
2008	3.9%	4,278
2009	2.3%	4,377
2010	1.1%	4,425
2011	0.8%	4,460
2012	0.0%	4,460
2013	0.3%	4,474
2014	1.1%	4,523
2015	1.2%	4,577
2016	0.6%	4,605

13

U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics (OES), Median Hourly Earnings, Education, Training, and Library Occupations, <http://www.bls.gov/oes>, percent calculated by author.

Adjustments To Part-Time Earnings

Gross Income Base	100.00%
x Worklife Adjustment	96.20%
x (1 - 4% unemployment factor) ¹⁴	96.00%
= Adjusted Earnings Base	92.35%
x (1 - 37% personal consumption)	63.00%
= Adjusted Income Factor	58.18%

14

U.S. Dept of Labor, Bureau of Labor Statistics, Labor Force Statistics including the National Unemployment Rate (Current Population Survey - CPS), unemployment rate by age, all males, www.bls.gov/cps, average calculated by author.

Adjusted Part-Time Income Loss Past Years

Year (1)	Portion of Year (2)	Estimated Gross Earnings (3)	Adjusted Income (2) x (3) x 58.18% (4)
2002	100%	\$ 3,570	\$ 2,077
2003	100%	3,620	2,106
2004	100%	3,736	2,173
2005	100%	3,829	2,228
2006	100%	3,975	2,312
2007	100%	4,118	2,396
2008	100%	4,278	2,489
2009	100%	4,377	2,546
2010	100%	4,425	2,574
2011	100%	4,460	2,595
2012	100%	4,460	2,595
2013	100%	4,474	2,603
2014	100%	4,523	2,631
2015	100%	4,577	2,663
2016	75%	4,605	2,009
Total:			\$ 35,999

Future Years

Yearly Increase & Present Value

Growth Rate: 3.8%
Discount Rate: 2.75%

Adjusted Part-Time Income Loss Future Years

Year	Portion of Year	Gross Earnings [@ 3.8%]	Adjusted Income [(2) x (3) x 58.18%]	Present Value [@ 2.75%]
(1)	(2)	(3)	(4)	(5)
2016	25%	\$ 4,605	\$ 670	\$ 670
2017	100%	4,780	2,781	2,706
2018	100%	4,961	2,886	2,734
2019	100%	5,150	2,996	2,762
2020	100%	5,346	3,110	2,790
2021	100%	5,549	3,228	2,819
2022*	29%	5,759	972	826
Total:				\$ 15,307

* decedent's statistical date of retirement: April 14

Household Services

Hours

Age of Decedent	Weekly Hours ¹⁵	Yearly Hours	Time Period
under 65	14.08	732	09/11/01 - 01/02/18
65 to 74	13.02	677	01/03/18 - 01/02/28
75 & over	10.97	570	01/03/28 - 02/03/33

15

The Dollar Value of a Day, Time Diary Analysis, 2014 Dollar Valuation, Expectancy Data Corp., Shawnee Mission, KS, 2015, Table 8; and U.S. Department of Commerce, Current Population Reports, *Americans with Disabilities: 2010*, Household Economic Studies, Series P-70-131, Table D-1, issued July 2012.

Wage Rate

Year	Yearly Increase ¹⁶	Estimated Hourly Rate
2001	-	\$ 13.85
2002	2.3%	14.17
2003	1.7%	14.41
2004	2.2%	14.73
2005	2.3%	15.07
2006	3.3%	15.57
2007	3.4%	16.10
2008	3.1%	16.60
2009	2.4%	16.99
2010	2.0%	17.33
2011	1.8%	17.65
2012	0.8%	17.79
2013	1.0%	17.96
2014 ¹⁷	1.2%	18.18
2015	1.8%	18.51
2016	1.2%	18.73

16

U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics (OES), Median Hourly Earnings, All Occupations, <http://www.bls.gov/oes>, percent calculated by author.

17

The Dollar Value of a Day, Time Diary Analysis, 2014 Dollar Valuation, Expectancy Data Corp., Shawnee Mission, KS, 2015, Tables 8 and 229.

Loss of Household Services Past Years

Year (1)	Portion of Year (2)	Yearly Hours (3)	Hourly Wage (4)	Total Value [(2) x (3) x (4)] (5)
2001	30%	732	\$ 13.85	\$ 3,043
2002	100%	732	14.17	10,377
2003	100%	732	14.41	10,553
2004	100%	732	14.73	10,785
2005	100%	732	15.07	11,033
2006	100%	732	15.57	11,398
2007	100%	732	16.10	11,785
2008	100%	732	16.60	12,150
2009	100%	732	16.99	12,442
2010	100%	732	17.33	12,691
2011	100%	732	17.65	12,919
2012	100%	732	17.79	13,023
2013	100%	732	17.96	13,153
2014	100%	732	18.18	13,311
2015	100%	732	18.51	13,550
2016	75%	732	18.73	10,285
Total:				\$ 182,498

Yearly Increase & Present Value

Growth Rate: 3.9%
Discount Rate: 3.25%

Loss of Household Services Future Years

Year	Portion of Year	Yearly Hours	Hourly Wage [@ 3.9%]	Total Value [(2) x (3) x (4)]	Present Value [@ 3.25%]
(1)	(2)	(3)	(4)	(5)	(6)
2016	25%	732	\$18.73	\$ 3,428	\$ 3,428
2017	100%	732	19.46	14,248	13,799
2018	1%	732	20.22	148	139
2018*	99%	677	20.22	13,556	12,716
2019	100%	677	21.01	14,227	12,925
2020	100%	677	21.83	14,782	13,007
2021	100%	677	22.68	15,358	13,089
2022	100%	677	23.56	15,957	13,171
2023	100%	677	24.48	16,580	13,254
2024	100%	677	25.44	17,226	13,337
2025	100%	677	26.43	17,898	13,421
2026	100%	677	27.46	18,596	13,506
2027	100%	677	28.53	19,322	13,591
2028	1%	677	29.64	201	137
2028*	99%	570	29.64	16,737	11,403
2029	100%	570	30.80	17,566	11,590
2030	100%	570	32.00	18,251	11,663
2031	100%	570	33.25	18,963	11,737
2032	100%	570	34.54	19,702	11,811
2033^	10%	570	35.89	2,047	1,188
					Total: \$208,913

* decedent's 65th and 75th birthday: January 3

^ decedent's statistical date of death: February 3

Summary

Past Years	Future Years	Total	Component of Analysis
\$ 1,532,827	\$ 673,009	\$ 2,205,836	adjusted full-time income
-	525,598	525,598	adjusted pension income
35,999	15,307	51,306	adjusted part-time income
182,498	208,913	391,411	household services
<u>\$ 1,751,324</u>	<u>\$ 1,422,827</u>	<u>\$ 3,174,151</u>	<u>total present value of loss</u>



August 29, 2016

Dorothea M. Capone, Esq.
BAUMEISTER & SAMUELS, P.C.
140 Broadway, 46th Floor
New York, New York 10005

Re: Sean Rooney

Dear Ms. Capone:

Sobel Tinari Economics Group was retained to evaluate economic damages as a result of the death of Sean Rooney. Background facts regarding the decedent and family were provided in a packet of documents pursuant to this matter.

Sobel Tinari Economics had been previously retained by Baumeister & Samuels, P.C. to evaluate decedent's economic damages. This analysis serves as an update, as of this date, of the present value of economic losses incurred by decedent's family members in this matter. We have calculated plaintiff's projected earnings and pension benefits through Mr. Rooney's statistical date of retirement (December 7, 2016). Household services are projected to Ms. Eckert's actual date of death (February 12, 2009). Within a reasonable degree of economic certainty, and based on the facts and analysis attached to this letter, it is our professional opinion that the total present value of the past and future pecuniary damages resulting from the death of Sean Rooney amounts to **\$1,156,375**.

This amount does not take into account the ramifications of intangible, non-economic losses such as human suffering, love, emotional feelings, or consortium that may have been experienced by decedent and decedent's family members.

The detailed calculations are shown in the tables attached to this letter.

Reply to:

293 Eisenhower Parkway, Suite 190
Livingston, NJ 07039
Tel 973.992.1800
Fax 973.994.1571

www.sobeltinariconomics.com

112 West 34th Street, 18th Floor
New York, NY 10120
Tel 212.201.0938
Fax 212.201.0937

BAUMEISTER & SAMUELS, P.C. / Rooney
August 29, 2016
page 2

The preceding findings are based on information provided to us as of this date. They are subject to revision should additional information be forthcoming that would change any facts or assumptions upon which this analysis rests.

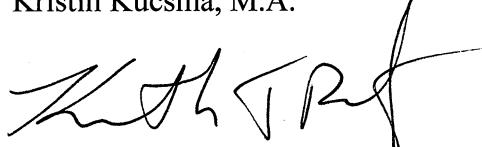
We trust that you will find the report clear and informative. Should you have any additional questions, or wish to explore any aspect of our findings in more detail, please do not hesitate to contact us. Our current Qualifications Profiles are appended.

Lastly, we certify that the Sobel Tinari Economics Group has received, thus far, \$0 compensation for preparation of an updated report for Sean Rooney. As of this date, an outstanding balance of \$2,000 is due. Our services are billed according to our Professional Fees, a copy of which is attached to this letter.

Sincerely,



Kristin Kucsma, M.A.



Kenneth T. Betz, MBA, M.A.

Sean Rooney

born: February 15, 1951

died: September 11, 2001

age: 50.57 years

statistical retirement: 65.81 years (December 7, 2016)¹

worklife ratio: 84.8%²

life expectancy: 80.27 years (May 24, 2031)³

residence: Stamford, Connecticut

education: some college, no degree

employer: Aon Service Corporation

position: Vice President for Risk Management Services⁴

spouse: Beverly Eckert (born: 05/29/51)

spouse's date of death: February 12, 2009 (age 57.71)

1

Gary R. Skoog and James E. Ciecka, "Probability Mass Functions for Years to Final Separation from the Labor Force Induced by the Markov Model," *Journal of Forensic Economics*, 16(1), 2003, pp. 51-86, by interpolation.

2

Gary R. Skoog, James E. Ciecka and Kurt V. Krueger, "The Markov Process Model of Labor Force Activity: Extended Tables of Central Tendency, Shape, Percentile Points, and Bootstrap Standard Errors", *Journal of Forensic Economics*, Volume 22, No. 2, August 2011, pp. 183-190, by interpolation.

3

National Vital Statistics Reports, Volume 64, No. 11, United States Life Tables, 2011, Tables 2 and 3, September 22, 2015, http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_11.pdf.

4

The New York Times, Beverly Eckert, Leader of Families of 9/11 Victims, Dies at 57, <http://www.nytimes.com/2009/02/14/nyregion/14eckert.html>, dated February 14, 2009.

Components of Analysis

1. adjusted income
2. pension income
3. household services

Earnings History⁵

Year	W-2 Earnings
1999	\$76,019
2000	78,699
2001*	72,698

Salary History⁶

Year	Base Salary	Calendar Year Bonus
January 15, 1997	\$ 71,933	
June 29, 1998	74,091	\$ 1,500
June 27, 1999	76,314	1,500
June 25, 2000	79,367	1,500
June 24, 2001*	82,145	2,000

* date of death: September 11

Earnings Base

\$82,820 in 2001 dollars

[weighted average of 2001 salary plus
assumed annual bonus of \$2,000]

5

personal income tax returns and W-2 Wage and Tax Statements

6

decedent's Aon employment records, p. 1.

Projected Earnings Past Years

Year	Yearly Increase ⁷	Projected Yearly Earnings
2001	-	\$82,820
2002	4.5%	86,547
2003	5.6%	91,394
2004	5.0%	95,963
2005	4.3%	100,090
2006	4.3%	104,393
2007	4.3%	108,882
2008	3.8%	113,020
2009	1.9%	115,167
2010	2.4%	117,931
2011	1.6%	119,818
2012	1.1%	121,136
2013	1.8%	123,317
2014	1.7%	125,413
2015	1.3%	127,043
2016	1.5%	128,949

7

U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics (OES), Median Hourly Earnings, Management Occupations, <http://www.bls.gov/oes>, percent calculated by author.

Adjustments to Earnings

	Through 2008	2009 Thereafter
Gross Income Base	100.00%	100.00%
x Worklife Adjustment	84.80%	84.80%
x (1 - 3.8% unemployment factor) ⁸	96.20%	96.20%
= Adjusted Earnings Base	81.58%	81.58%
x (1 + 5.3%, 6% fringe benefits) ⁹	105.30%	106.00%
= Fringe-Adjusted Earnings	85.90%	86.47%
x (1 - 37% personal consumption) ¹⁰	63.00%	63.00%
= Adjusted Income Factor	54.12%	54.48%

8

U.S. Dept of Labor, Bureau of Labor Statistics, Labor Force Statistics including the National Unemployment Rate (Current Population Survey - CPS), unemployment rate by age, all males, www.bls.gov/cps, average calculated by author; and State of New York, Department of Labor, Unemployment Insurance, <http://www.labor.state.ny.us/ui/claimantinfo/beforeyouapplyfaq.shtml>

9

Aon Savings Plan, dated 1/2001; and decedent's Aon employment records, pp. 1 & 3; and Forms 11-K, fiscal years ending December 31, 2009 and 2015.

10

The method used to generate personal consumption rates is outlined in a paper entitled "A Preliminary and Simplified Method for Establishing the Personal Consumption Deduction from Decedent-Only Earnings", by Frank D. Tinari, Ph.D. and Stephen B. Levinson, Ph.D., presented at the Eastern Economic Association Annual Conference, National Association of Forensic Economics session, New York City, February 26, 2011, Table 1.

Adjusted Income Past Years

Year (1)	Portion of Year (2)	Estimated Gross Earnings (3)	Adjusted Income [(2) x (3) x 54.12% / 54.48%] (4)	Cumulative Income (5)
2001	100%	\$ 10,122*	\$ 5,478	\$ 5,478
2002	100%	86,547	46,839	52,317
2003	100%	91,394	49,462	101,779
2004	100%	95,963	51,935	153,715
2005	100%	100,090	54,169	207,883
2006	100%	104,393	56,498	264,381
2007	100%	108,882	58,927	323,308
2008	100%	113,020	61,166	384,474
2009^	100%	115,167	62,743	447,218
2010	100%	117,931	64,249	511,467
2011	100%	119,818	65,277	576,744
2012	100%	121,136	65,995	642,739
2013	100%	123,317	67,183	709,921
2014	100%	125,413	68,325	778,247
2015	100%	127,043	69,213	847,460
2016#	94%	128,949	66,036	913,496

* projected earnings (\$82,820) less actual earnings (\$72,698)

^ spouse's date of death: February 12

statistical date of retirement: December 7

Pension Income¹¹

Prior Service Benefit + Future Service Benefit = Annual Normal Retirement Benefit

Prior Service Benefit

Accrued Benefit x (Final Average Earnings at Date of Termination ÷ Final Average Earnings as of 12/31/1997)

Future Service Benefit

1.15% x Final Average Earnings x Years of Service after 1/1/98

+

0.45% x Final Average Earnings in excess of Covered Compensation x Years of Service after 1/1/98

11

Aon Pension Plan - Summary Plan Description, undated, p. 10

Pension Inputs

Service Date: September 7, 1993

Accrued Benefit as of 12/31/97: \$3,031

"Final Average Earnings" as of 12/31/97: \$67,120

"Final Average Earnings" as of 4/1/09¹²: \$104,470

Adjusted Accrued Benefit as of 12/31/97: \$4,718

Years of Service after 1/1/98: 11.25

Covered Compensation¹³: \$53,954

Projected Pension Benefit

Prior Service Benefit: \$ 4,718

Future Service Benefit (1.15%): 13,516

Future Service Benefit (0.45%): 2,557

Total Pension Benefit: \$ 20,791

12

Calculated by author, based on the average of the plaintiff's 2004 to 2008 estimated gross earnings.

13

Average of Historical Social Security Historical and Benefit bases - Social Security Administration, 1974-2008., <https://www.ssa.gov/OACT/COLA/cbb.html>.

Present Value

Discount Rate: 3.25%¹⁴

Adjustments to Pension Income

Gross Pension Benefit	100.00%
x (1 - 37% personal consumption)	63.00%
= Adjusted Pension Factor (APF)	63.00%

14

Bond Yields and Interest Rates, 1947-2015, *Economic Report of the President*, February 2016, Table B-25, <http://www.gpo.gov/fdsys/pkg/ERP-2016/pdf/ERP-2016.pdf>, the Board of Governors of the Federal Reserve System, <http://www.federalreserve.gov/> and other publically available data on interest rates.

Pension Income

Year (1)	Portion of Year (2)	Projected Pension Income (3)	Adjusted Yearly Income [(2) x (3) x 63.0%] (4)	Present Value [@ 3.25%] (5)
2016	6%	\$ 20,791	\$ 786	\$ 786
2017	100%	20,791	13,098	12,686
2018	100%	20,791	13,098	12,287
2019	100%	20,791	13,098	11,900
2020	100%	20,791	13,098	11,525
2021	100%	20,791	13,098	11,162
2022	100%	20,791	13,098	10,811
2023	100%	20,791	13,098	10,471
2024	100%	20,791	13,098	10,141
2025	100%	20,791	13,098	9,822
2026	100%	20,791	13,098	9,513
2027	100%	20,791	13,098	9,213
2028	100%	20,791	13,098	8,923
2029	100%	20,791	13,098	8,643
2030	100%	20,791	13,098	8,370
2031*	40%	20,791	5,239	3,243
Total:				\$ 149,497

* statistical date of death: May 24

Household Services

Hours

Age of Decedent	Weekly Hours ¹⁵	Yearly Hours	Applicable Time Period
under 65	14.08	732	09/11/01 - 02/12/09

Wage Rate

Year	Yearly Increase ¹⁶	Estimated Hourly Rate
2001	-	\$15.68
2002	2.3%	16.04
2003	1.7%	16.32
2004	2.2%	16.68
2005	2.3%	17.06
2006	3.3%	17.62
2007	3.4%	18.22
2008	3.1%	18.79
2009	2.4%	19.24
2010	2.0%	19.62
2011	1.8%	19.97
2012	0.8%	20.13
2013	1.0%	20.34
2014 ¹⁷	1.3%	20.60

¹⁵

The Dollar Value of a Day, Time Diary Analysis, 2014 Dollar Valuation, Expectancy Data Corp., Shawnee Mission, KS, 2015, Table 8.

¹⁶

U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics (OES), Median Hourly Earnings, All Occupations, <http://www.bls.gov/oes>, percent calculated by author.

¹⁷

The Dollar Value of a Day, *op. cit.*, Tables 8 and 229.

Loss of Household Services Past Years

Year (1)	Portion of Year (2)	Yearly Hours (3)	Hourly Wage (4)	Total Value [(2) x (3) x (4)] (5)
2001*	30%	732	\$ 15.68	\$ 3,445
2002	100%	732	16.04	11,746
2003	100%	732	16.32	11,946
2004	100%	732	16.68	12,209
2005	100%	732	17.06	12,490
2006	100%	732	17.62	12,902
2007	100%	732	18.22	13,341
2008	100%	732	18.79	13,754
2009^	11%	732	19.24	1,549
			Total:	\$ 93,382

* date of death: September 11

^ spouse's date of death: February 12

Summary

Present Value	Component of Analysis
\$ 913,496	adjusted income
149,497	loss of pension income
93,382	household services
<u>\$ 1,156,375</u>	total present value of loss

Qualifications Profile

Kristin Kucsma, M.A.

KKucsma@SobelTinariEconomics.com

SOBEL TINARI ECONOMICS GROUP
293 Eisenhower Parkway, Suite 190
Livingston, NJ 07039
973-992-1800

Education

ABD in Economics, Rutgers University, New Brunswick, NJ
M.A. in Economics, Rutgers University, New Brunswick, NJ (1993)
B.A. in Economics / English Minor, Seton Hall University, South Orange, NJ, *summa cum laude* (1991)

Fields of Specialization

Applied Microeconomic Theory, American Economic History, Monetary History of the United States, Macroeconomic Theory and Business Cycles, Banking Structure and Regulation

Honors and Awards

Recognition Award, #1 Economic Expert, New York Law Journal, 2014 and 2015
“5.0” Teaching Commendation Award, Stillman School of Business, Seton Hall University, 2003-04.
Teaching Commendation Award, Stillman School of Business, Seton Hall University, 2002-2003, 2001-2002.
Recognition Award, Educational Opportunity Program, Seton Hall University, 2003
Professor of the Year Award, Alpha Kappa Psi, Seton Hall University, 2002-2003, 2001-2002.
President’s Award for Student Services, Seton Hall University, 2001
The Faculty Pirate Pride Award, Seton Hall University, 2000-2001
Feature of Faculty Profile, Seton Hall University Magazine, 2001

Positions Held

Principal of the Firm, Sobel & Co., January 1, 2016 - present

In addition to my responsibilities as Managing Director and Senior Economist of the Sobel Tinari Economics Group (STEG), a wholly owned subsidiary of Sobel & Co., I represent and lead STEG as a division of Sobel & Co.

Kristin Kucsma, M.A.

Positions Held (cont'd)

Managing Director (since July 2014) and Senior Economist, Sobel Tinari Economics Group, January 2008 - present

Primary responsibilities: oversee the day-to-day operations of the group; analyze data, prepare reports, and provide expert testimony; manage our team of economists, analysts and research assistants and collaborate on the group's more complex cases; perform independent and co-authored research, present at national and regional conferences, regularly teach CLEs and lead other seminars, and serve as an active participant in the field of forensic economics.

President, Bull and Bear Consulting, September 2006 - December 2007

Review portfolios of equities, fixed-income securities and mutual funds for clients; manage financial assets for several high-end clients; advise clients and refer them to specialists regarding long-term care, supplemental health insurance and a variety of trusts including qualified personal residential and generation skipping trusts.

Lecturer, Department of Economics, Drew University, September 2004 – August 2006

Courses Taught: Money, Banking and the Macroeconomy; Principles of Microeconomics; Principles of Macroeconomics; Intermediate Macroeconomic Analysis; and Mergers and Manias: The Business of Banking

Faculty Associate, Department of Economics, Seton Hall University, Sept. 1999 - July 2004

Graduate Courses Taught: The National Economy (MBA Level Macro); HUB 1 (Blend of Economics and Corporate Finance); *Undergraduate Courses Taught:* Principles of Microeconomics; Principles of Macroeconomics; Money and Banking; Intermediate Microeconomic Theory; Government and Business; Labor Economics; Small Scale Technology; and Economics in Our Nation's Capital.

Program Coordinator for Economic History Sessions, Eastern Economic Association, 2005 - 2007.

Faculty Advisor to Omicron Delta Epsilon, the International Honor Society in Economics, Drew University and Seton Hall University, September 1999 – August 2006

Faculty Advisor for the Fed Challenge, Seton Hall University and the Federal Reserve Bank of New York, 2002-2004

Co-chair and Project Coordinator for University Retention Committee, Seton Hall University, December 2000 – July 2004

Adjunct Lecturer, Department of Economics, Seton Hall University, 1998 – 1999

Adjunct Lecturer, Department of Economics, Drew University, 1997 – 1999

Instructor, Department of Economics, Saint Peter's College, on-campus as well as at corporate satellite centers, 1995 – 1998

Instructor, Department of Economics, Rutgers University, New Brunswick NJ, 1992 – 1995

Teaching Assistant, Department of Economics, Rutgers University, New Brunswick NJ, 1991 – 1992

Kristin Kucsma, M.A.

Professional Activities

National Association of Forensic Economics, Chairperson, Software Committee,
2015- present
Member, District Ethics Committee, Office of Attorney Ethics of the Supreme Court of New Jersey, 2010 - present
National Association of Forensic Economics, 2010 - present
Member, Eastern Economic Association, 1997 - present
Member, Conference Organizing Committee, Eastern Economic Association, 2006
Co-Developer of Revised Business Writing Course, Stillman School of Business, Seton Hall University, 2003 – 04.
Member, CDI-7: Writing Intensive Workshop for Business, Seton Hall University, 2003 – 04.
Designer of Various Question/Answer Duos for Sophomore Assessment, Stillman School of Business, Seton Hall University, 2001 – 2004
Topics included the “Congested Parks Dilemma”, the impact on the US economy of tobacco litigation, issues of market structure with respect to TIVO, the blackout of August 2003 that affected the northeast United States and the Martha Stewart litigation
Guest Speaker, National Council of Negro Women, Seton Hall University, February 2004

Publications

“How to Distinguish Between a Forensic Economist and an Accountant and Why it Matters When Evaluating Economic Damages”, *The New Jersey Law Journal*, 2014 How-To Guide.
“How to Make Sure Your Economic Expert is Prepared for Cross-Examination”, *The New Jersey Law Journal*, 2013 How-To Guide.
“Assessing Economic Damages in Personal Injury and Wrongful Death Litigation: The State of New Jersey,” co-authored with Frank D. Tinari, *Journal of Forensic Economics*, 21(2), June 2010, pp. 219 - 234, <http://www.JournalofForensicEconomics.com/doi/pdf/10.5085/jfe21.2.219>.
“State's Housing Rules Ignore Needs of Immigrants,” co-authored with Frank D. Tinari, *Daily Record*, Morris County, NJ, August 30, 2009. (Note: article title is what is available electronically; newsprint copy is titled: “COAH Rules Hurt Immigrants.”)
White paper: Is Affordable Housing the Remedy to Perceived Discrimination Against Immigrants?, co-authored with Frank D. Tinari, prepared for the Community Forum on Immigration and Education Issues, convened by the New Jersey State Advisory Committee to the United States Commission on Civil Rights, May 2009.
“COAH Research is Full of Short-comings,” co-authored with Frank D. Tinari, *Newark Star-Ledger*, April 1, 2009.
“Companionship, Advice, and Counsel Services,” co-author, Section 640 of Chapter 6, The Value of Household Services, of *Determining Economic Damages*, by Gerald D. Martin, Ph.D., Costa Mesa, Ca: James Publishing, Inc., July 2008, pp. 6-7 - 6-11.

Kristin Kucsma, M.A.

Publications (cont'd)

Wrote entries for *barter, cost of information, demand, the discount rate, the functions of money, price floors and ceilings and profit maximization* for Encyclopedia of Capitalism, Dr. Syed B. Hussain, editor, Golson Books, Ltd., published 2004

Papers Presented

- “A Comprehensive Assessment of Economic Damages in Wrongful Death Matters: Focus on On-call Services”, Seminar sponsored by the Pennsylvania Association for Justice, P.A., Philadelphia PA, October 2015
- “The Crisis in Economics Education and Its Impact on Political Participation and Economic Growth”, The American Monetary Institute Monetary Reform Conference, Chicago IL, September 2006
- “A Picture Comes into Focus: A Reexamination of the Crisis of 1877-78”, Eastern Economic Association Conference, Philadelphia PA, February 2006
- “The Opportunity Cost of Undervaluing Core Concepts in Macroeconomics Courses”, Eastern Economic Association Conference, Philadelphia PA, February 2006
- “A Framework for Teaching Money and Banking in a Liberal Arts Setting”, as part of a panel discussion with Mary Lesser and Steven Cechetti, Eastern Economic Association Conference, New York NY, February 2005
- “Portrait of a Panic: The Crisis of 1877”, Eastern Economic Association Conference, Washington DC, February 2004
- “Betrayed by the FDIC? A Preliminary Examination of the D’Oench, Duhme Doctrine and Its Impact on the Potential Efficiency of Banks in the United States”, Eastern Economic Association Conference, New York NY, February 2003
- “Celebrating Economics as a Social Science”, 14th Annual Conference on Teaching Economics: Instruction and Classroom Based Research at Robert Morris University, Moon Township PA, February 2003
- “Deciphering the Mystery of Medieval Debasement”, Eastern Economic Association Conference, New York NY, February 2001

Comments, Notes and Reviews

Review for publisher of Laurence Ball’s *Money and Banking* textbook, 2003 - 2004

Referee, “A Test of the Purchasing Power Parity Concept Including the Law of One Price and Its Applicability in International Business”, *Journal of Applied Management*, South Orange, New Jersey, 1999

Kristin Kucsma, M.A.

Other Conference Activities

Session Organizer for Undergraduate Panel: "Tax Reform in the US: Is A Consumption Tax the Answer?" Eastern Economic Association Conference, Philadelphia PA, February 2006

Discussant for two panels: "Topics in Economic History" and "Teaching and Learning Economics: Achieving Desired Outcomes", Eastern Economic Association Conference, Philadelphia, February 2006

Discussant for two panels: "Personal Behavior: Time, Money, Risk and Trust" and "Lessons From the Past: Money, Trade and Wages", Eastern Economic Association Conference, New York NY, February 2001

Discussant for panel on "Political and Economic Transformations", Northeastern Political Science Association and International Studies Association Conference, Philadelphia PA, November 1999

"A Picture Comes Into Focus: A Reexamination of the Crisis of 1877-78", Work in Progress

"The Opportunity Cost of Undervaluing Core Concepts in Undergraduate Macroeconomics Courses", February 2006

"Regulation of the US Banking Industry in the Aftermath of the Great Depression", Work in Progress, 2004

"Increasing the Marginal Utility Derived From An Economics Course Through Experiential Education", Work in Progress, 2004

"Betrayed by the FDIC? A Preliminary Examination of the D'Oench, Duhme Doctrine and Its Impact on the Potential Efficiency of Banks in the United States", 2001

Speaking Engagements

"Direct and Cross Examination of Economic, Vocational and Life Care Planning Experts in the Catastrophic Injury Case: Use of Demonstrative Evidence", CLE program co-presenter, sponsored by CMCS Management, Inc., Saddle Brook, New Jersey, March 16, 2016.

"Current Developments in Testimony for the Defense: a Panel Discussion", Panelist, sponsored by the National Association of Forensic Economics at the Eastern Economic Association Conference, Washington, D.C., February 27, 2016.

"Presenting the Economist at Trial – A Live Demonstration with Expert" and "Panel Discussion on the Finer Points of Direct Examination", program co-presenter, sponsored by the New Jersey Association for Justice: Six Concurrent Seminars, New Brunswick, New Jersey, February 6, 2016.

"Valuing Economic Damages in Wrongful Death Cases", CLE program presenter, sponsored by Sobel Tinari Economics Group, Livingston, New Jersey, November 17, 2015.

"Deposing Your Economic Expert", Hudson County Inn of Court, Hudson County Community College Culinary Conference Center, Jersey City, New Jersey, November 9, 2015.

"Recent Developments in Assessing Economic Damages", CLE program co-presenter, sponsored by CMCS Management, Inc., Saddle Brook, New Jersey, October 29, 2015.

Kristin Kucsma, M.A.

Speaking Engagements (cont'd)

- "An Introduction to Economic Damages", CLE program co-presenter, sponsored by Union County Bar Association, Summit, New Jersey, October 27, 2015.
- "Masters in Trial Tactics: How to Maximize Your Damages", CLE program co-presenter, sponsored by Pennsylvania Association for Justice, P.A., Philadelphia, Pennsylvania, October 22, 2015.
- "Valuing Economic Damages in Cases Involving Catastrophic Injury", CLE program presenter, sponsored by Sobel Tinari Economics Group, Livingston, New Jersey, October 13, 2015
- "Valuing Economic Damages in Medical Malpractice Cases in New York" CLE program co-presenter, sponsored by NYLJ, Union League, New York, October 9, 2015.
- "Introduction to Economic Damages", CLE program presenter, sponsored by Sobel Tinari Economics Group, Livingston, New Jersey, September 16, 2015.
- "Valuing Economic Damages in Wrongful Death Cases", CLE program co-presenter, sponsored by the New Jersey Association for Justice, Boardwalk Seminar, Atlantic City, New Jersey, May 1, 2015.
- "Valuing Economic Damages in Employment Law Cases", CLE program co-presenter, sponsored by the Legal Intelligencer, Philadelphia, Pennsylvania, April 10, 2015.
- "Telling the Damages Story: Effectively Proving Damages at Trial", CLE program presenter, sponsored by the New York State Academy of Trial Lawyers, New York, NY, April 30 and April 31, 2015.
- "Building the House of Damages: Using a Vocational Expert, Life Care Planner, and Economist", CLE program presenter, sponsored by CMCS Management, Inc., Saddle Brook, New Jersey, March 26, 2015.
- "How to Effectively Quantify Economic Damages in Personal Injury and Medical Malpractice Cases", CLE program presenter, sponsored by the NJAJ Pines Manor, Four Concurrent Seminars, Edison, New Jersey, February 28, 2015.
- "Valuing Economic Damages in Wrongful Death Cases", CLE program co-presenter, sponsored by the Gloucester County Legal Education Association, Mantua Township, New Jersey, November 22, 2014.
- "Valuing Economic Damages in Catastrophic Injury Cases", CLE program presenter, sponsored by the Gloucester County Legal Education Association, Mantua Township, New Jersey, November 22, 2014.
- "Integrating Vocational Experts and Economics in Documenting Damages in Personal Injury Cases", CLE program co-presenter, sponsored by CMCS Management, Inc., Saddle Brook, New Jersey, October 23, 2014.
- "Economic Damages, Proving Loss With Life Care Planners", Vocational Experts and Economists in Personal Injury and Medical Malpractice Cases , CLE program co-presenter, sponsored by NYSTLA Management, Inc., New York, New York, May 20 and 28, 2014.
- "Use of an Economist in Litigated Matters", Hudson County Inn of Court, Hudson County Community College Culinary Conference Center, Jersey City, New Jersey, April 21, 2014.

Kristin Kucsma, M.A.

Speaking Engagements (cont'd)

- “The Use of a Vocational Expert/Life Care Planner and Economist in Assessing Damages in Child and Adult Personal Injury Cases”, CLE program co-presenter, sponsored by CMCS Management, Inc., Saddle Brook, New Jersey, March 20, 2014.
- “How To Effectively Quantify Economic Damages in Personal Injury and Medical Malpractice Cases”, Clifford Inn of Court, Brownstone, Paterson, NJ, February 4, 2014.
- “Documenting Vocational and Economic Damages in Personal Injury Cases”, CLE program co-presenter, sponsored by CMCS Management, Inc., Mount Laurel, New Jersey, December 11, 2013.
- “How to Effectively Quantify Economic Damages in Personal Injury and Medical Malpractice Cases”, CLE program co-presenter, sponsored by Comprehensive Medical Case Management, Inc., Philadelphia, July 30, 2013.
- “The Economist’s Role: Lost Profits & Employment Litigation”, CLE program co-presenter, sponsored by the New Jersey Law Journal, Edison, NJ, May 1, 2013.
- “The Economist’s Role: Lost Profits & Employment Litigation”, CLE program co-presenter, sponsored by the New Jersey Law Journal, Florham Park, NJ, April 10, 2013.
- “Documenting Vocational & Economic Damages in Catastrophic Personal Injury Cases”, CLE program co-presenter, sponsored by CMCS Management, Inc., Saddle Brook, New Jersey, March 14, 2013. (video)
- “Measuring Lost Profits”, Worrall F. Mountain American Inn of Court, Morristown, NJ, October 22, 2012.
- “Proving Damages to the Jury”, CLE program co-presenter, sponsored by New York State Academy of Trial Lawyers, October 23, 2012.
- “Using an Economist to Prove Damages in Non-Catastrophic Personal Injury Cases”, CLE program co-presenter, sponsored by CMCS Management, Inc., Saddle Brook, New Jersey, October 11, 2012. (video taped).
- “Some Key Issues in the Use of Economic Experts”, co-presenter, *Litigation Summit*, Philadelphia, September 13, 2012. (audio/video taped)
- Mock Trial, participant (economic expert for plaintiff), CLE program sponsored by New Jersey Law Center, New Brunswick, NJ, July 11, 2012.
- “Valuing Economic Damages in Matters Involving Employment Litigation”, Brennan/Vanderbilt Inn of Court, East Hanover, NJ, June 25, 2012.
- “Proof of Damages in a Wrongful Death Case” at the “Proving Damages in Personal Injury Cases: How BIG is Your Case?” seminar, sponsored by the Gann Legal Education Foundation, Renaissance Woodbridge in Iselin, New Jersey, April 22, 2011.
- “How Outstanding Plaintiff Lawyers Build Their Case on Damages - and How Effective Defense Lawyers Can Destroy It”, Obstetric Malpractice: Cutting-Edge Techniques for Bringing and Defending Perinatal Brain Injury Cases, national conference, continuing education seminar, Chicago, IL, November 9 - 11, 2009.
- “Deposition of an Economist from the Witness’ Viewpoint”, Taking and Defending Effective Depositions in New York, continuing education seminar, New York, NY, March 12, 2009.
- “The Role of the Economist in Assessing Damages for Defendants”, with co-presenter Frank D.

Kristin Kucsma, M.A.

Speaking Engagements (cont'd)

Tinari, Ph.D., GEICO, Huntington, NY, July 31, 2008.

"Economic and Statistical Issues in Assessing Damages", with co-presenter Frank D. Tinari, Ph.D., LUM DRASCO & POSITAN, Roseland, NJ, June 2, 2008.

"Economic Damages: Overlooked Elements in Personal Injury and Wrongful Death Cases", ATLA-NJ Women Attorney's Dinner Meeting, Mountainside, NJ, April 9, 2008.

Kristin Kucsma, M.A.

Trials, Arbitrations, Mediations, and Depositions

Ms. Kucsma has testified in over 193 trials, arbitrations, and mediations in both federal and state courts. She has testified in over 233 depositions. A detailed listing of Ms. Kucsma's trial and deposition testimony is available upon request.

Ms. Kucsma has prepared numerous economic loss evaluations for use in litigation regarding economic damages, earnings, fringe benefits, household services, guidance, companionship, employment discrimination, lost profits, commercial damages, breach of contract, defamation, divorce, and punitive damages.

Qualifications Profile

Kenneth T. Betz, MBA, M.A.
Kbetz@SobelTinariEconomics.com
Sobel Tinari Economics Group
293 Eisenhower Parkway, Suite 190
Livingston, NJ 07039
973-992-1800

Education

M.A. in Financial Economics, Fairleigh Dickinson University, Madison, NJ (1998)
MBA in Finance, Fairleigh Dickinson University, Madison , NJ (1982)
B.S. in Economics and Finance, Fairleigh Dickinson University, Madison, NJ (1980)

Fields of Specialization

Macroeconomic Theory, Monetary Policy, Corporate Finance, Forensic Economics

Positions Held

Economist, Sobel Tinari Economics Group, January 2011 - present

Primary responsibilities: analyze data, prepare reports, provide expert testimony, and serve as an active participant in the field of forensic economics.

Senior Lecturer in Economics and Finance, Fairleigh Dickinson University, Silberman College of Business, August 2011 - present.

Lecturer, August 2002 - July 2011
Adjunct, January 1998 - July 2002

Undergraduate Courses Taught:

Money and Banking, Principles of Macroeconomics, Principles of Microeconomics, Business Finance I, Business Finance II, International Business Finance, International Monetary Theory, Financial Markets and Institutions, International Trade, Economics of Sports, Sports Finance, Principles of Financial Analysis, Intermediate Financial Analysis.

Graduate Courses Taught:

Economic Analysis, Financial Analysis, Global Economic Environment.

Kenneth T. Betz, MBA, M.A.

Associate of Economist M. Marcus, Ph.D., 1981 -2010

Financial analysis and determination of Rate of Return for regulated utilities. Prepared reports appraising economic loss and provided expert testimony in personal injury, wrongful death and employment cases.

Adjunct Instructor, County College of Morris, January 1988-June 1990

Courses Taught: Principles of Macroeconomics, Business Mathematics.

Academic and Professional Activities

Member, American Economic Association

Member, Eastern Economic Association

Member, American Association of University Professors

Member, National Association of Forensic Economics

Member, National Association for Business Economics

Faculty panelist, Becton College of Arts and Sciences "Hot Topics" event, discussing the economic impact of the Gulf Oil Spill, September 2010.

Chairman of the Finance Committee, Assumption College, Mendham, N.J., 2009 to present.

Member, Board of Trustees, Assumption College, Mendham, N.J., 2015 to present.

Member, Mendham Borough Open Space Committee, 1999 to 2006.

Active Member, Mendham Borough Fire Department, 1976 to present.

Treasurer/ Assistant Treasurer, 1984-2003.

Member, Mendham Borough First Aid Rescue Squad, 1977 to 2006. Director 1982-83,

Treasurer/ Assistant Treasurer, 2004-2006.

Treasurer, Mendham Borough Chapter of New Jersey State Firemen's Association, 1993-03.

Student Government Association Faculty Advisor of the Year "Maddy Award"

winner, 2008 and 2012.

FDU Greek Life Faculty Advisor of the Year, 2007.

Silberman College of Business, College at Florham, Teacher of the Year, 2005 and 2015.

Kenneth T. Betz, MBA, M.A.

Publications

“Valuing Non-Wage Compensation of Private Sector Labor Union Workers in the Construction Trades,” co-authored with Frank D. Tinari, Ph.D., *Journal of Forensic Economics*, 24(2), October 2013, pp. 205-220.

“Predictors of Performance in Introductory Finance: Variables within and beyond the Student’s Control,” co-authored with Fred Englander and Zhaobo Wang, *Higher Education Studies*, Volume 5, No. 4 (2015), pp. 119-130.

Presentations

Paper presentation, “Calculating Lost Fringe Benefits of Private-Sector Union Workers in Injury Cases,” with Frank D. Tinari, Ph.D., NAFE session Eastern Economic Association Annual Conference, Boston, March 10, 2012.

“Direct Examination of a Vocational Expert & Economist in a Personal Injury Case,” co-presenter, CLE program sponsored by CMCS Management, Inc., Saddle Brook, NJ, Oct. 17, 2013.

Paper presentation, “The Role of Student Procrastination in Explaining Student Performance in an Introductory Finance Course” with Fred Englander, Ph.D. and Zhaobo Wang, Ph.D., Conference of the International Academy of Business and Public Administration Disciplines (IABPAD) in Las Vegas, Nevada, on October 24, 2014.

Trials and Depositions

Mr. Betz has testified in both federal and state courts. A detailed listing of Mr. Betz’ trial and deposition testimony is available upon request.

Mr. Betz has prepared numerous economic loss evaluations for use in litigation regarding economic damages: earnings, fringe benefits, household services, guidance, companionship, employment discrimination, and lost profits.